IOWA

PROFILES IN

soil health

Bill Totemeier
New London, Iowa
470 acres
Rotational Grazing System
Planting: legume mixture

unlock the SECRETS IN THE SOIL

Mob Grazing Produces Healthy Soil and Livestock.

Many attribute Iowa's agricultural soil erosion and water quality issues to row crop production. However, open – or continuous – grazing can also lead to gullies and cattle trails that can cause severe erosion and sediment runoff, as well as reduce forage tonnage produced on Iowa pastures.

USDA's Natural Resources Conservation Service (NRCS) is working with many of Iowa's livestock producers to graze livestock with healthy soil and diverse, grass legume mixtures in mind. The goal is to protect the natural soil and grass resource, and produce healthier and more productive animals.

Bill Totemeier of New London is one such producer working with NRCS to implement a grazing management plan to improve his already successful grazing system. He began rotating his cattle from paddock to paddock about 10 years ago. More recently, he set up a formal plan with NRCS that includes a new watering system, 2-strand high tensile electric fence, and new forage and cool season grass plantings on land that was formerly row cropped.

Totemeier's cattle graze in a three-acre paddock where the grass mix rested for several months prior to grazing, as part of his mob grazing system.

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Totemeier will receive financial assistance through USDA's Environmental Quality Incentives Program (EQIP) and Conservation Stewardship Program (CSP) to offset some of the conservation practice expenses. He says he likes the EQIP grazing plan because it is flexible. "Weather can be a factor in how often we rotate the cattle and where we graze them," said Totemeier.

He rotates about 180-head of mostly South Poll cattle across 470 acres. South Poll cattle are a cross between Barzona/Herefords and Senepol/Angus. "South Poll are bred for fertility, longevity, good udders, and proper disposition," says Totemeier. "They've got everything you need.

"They were bred for the production of grass-fed beef. They don't need grain, but gain extremely well when fed grain," he said.

Totemeier calls his grazing system a combination of mob and managed grazing, depending on the time of year, the parcel of ground, and what plants are growing. For example, Totemeier likes to graze his cattle in 50 percent timber and 50 percent grassland paddocks during the summer heat. "They spend the days in the woods eating high protein leaves from invasive honeysuckle," he said, "then move to grasslands in the evenings to eat mixed grasses and legumes. It's amazing how the cattle can balance their own diet when given the opportunity."

What is mob grazing?

Mob grazing involves moving cattle at least daily between small paddocks, sized to match the number of grazing cattle, and split by portable electric fence. The goal is for every plant in the grazing cell to be either eaten or walked on and trampled. Grass in each paddock then rests for 60-120 days or more.

"It's not a big deal if I move the cattle daily or weekly. What's important is managing around the weather, your forages, and always watching animal performance," said Totemeier. "Think holistically, be

Totemeier received planning and financial assistance from USDA-NRCS to install 2-strand high tensile electric fence for his rotation/mob grazing system.

flexible and vary paddock rotations year to year to allow seed production on all paddocks."

Benefits of mob grazing compared to continuous grazing include: allowing more cattle on the same or fewer acres, better weed control, less fertilizer cost, extended grazing season, improved livestock health, more plant diversity, and better soil health through built-up organic matter and reduced erosion.

"With a longer rest period (for grass), it's amazing what grows," said Totemeier. "Eventually you get such a healthy stand you don't have weeds because they are crowded out by new grass species.

"I have just about tripled my grass production and started growing new species like eastern gamma grass, Indiangrass, and big and little bluestem – all those species now have time to go to seed," he said.

Mob grazing fits into Totemeier's belief in a holistic approach where chemicals such as herbicides and insecticides are unnecessary if the grazing system is designed the right way with the right animals. Totemeier is not a Certified Organic producer, but nearly all of his inputs like salt and minerals are listed for Certified Organic production.

After about four years grazing South Poll in this more intensive way, he is developing healthy, productive

cattle. "I haven't used any chemical de-wormers for four years and I have encountered very little pink eye or foot rot."

'Mob grazing is like drought insurance'

During the 2012 drought and this year's extended dry summer, Totemeier was thankful for his mob grazing system. "Mob grazing is almost like drought insurance because a long resting period means a deeper root in the plant," he said. "Cattle only graze paddocks a few days or less and then I give the grass a 60 to 90 day rest period to allow plants to thrive, and everything goes to seed."

Drew DeLang, district conservationist for NRCS in Des Moines County, said much of the pasture in southeast Iowa in 2012 was short like a golf course fairway, "but Bill's still had plenty of grass and he was stockpiling and baling hay," he said.

"People were wondering how I still had grass," said Totemeier. "A lot of folks around here started feeding hay in August (2012). I don't believe I fed them hay until the first week of December."

Most Proud of Soil Conditions

Totemeier is a fourth generation farmer raising livestock and growing crops on the family farm, an Iowa Heritage Farm, which his great grandfather purchased in 1855. He says he is most proud that he is improving soil conditions. "I am not washing the soil down the river," he said. "I am trying to improve soil health a little bit every year, and I think it shows through the health of the cattle."

For more information about conservation practices and programs to help protect natural resources on your farm, visit your local NRCS office or go online to www.ia.nrcs.usda.gov.

Top: NRCS District Conservationist Drew DeLang (right) picks up some clover seed from the abundance of clover through one of the three-acre paddoks.

Bottom: Livestock enjoy grazing a new paddock that includes a legume mixture.

Want to unlock the secrets in YOUR soil?

Go to: www.nrcs.usda.gov

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